ABSTRACT OF THE DISCLOSURE

An enhanced visibility composition for implantation from a remote source, so that the composition can be readily observed under fluoroscopy or other imaging techniques. The compositions include a biocompatible matrix, such as a hard tissue implant material for example, and radiopaque particles mixed in the matrix. The radiopaque particles have a particle size between about 120μ and 2200μ, more preferably bout 350μ and 2200μ, even more preferably between about 450μ and 1600μ, and most preferably between about 570μ and 1150μ. Preferably the hard tissue implant and the radiopaque particles are formed or prepared in a slurry. Optionally, the enhanced visibility composition may further include additional radiopaque particles or contrast particles mixed in with the composition, which have a particle size between about 120μ and 350μ, preferably between about 120μ and 250μ.